

Energy Source Rating Sheet

BIOMASS energy		COAL energy		TOTAL RATING	
ADVANTAGE	DISADVANTAGE	ADVANTAGE	DISADVANTAGE	ADVANTAGE	DISADVANTAGE
1. Biomass is plants, trees, garbage, yard waste—anything that was alive a short time ago.		1. Coal is shiny black rock that is buried underground.			
2. All biomass contains energy. Biomass absorbs its energy from the sun and stores it as chemical energy.		2. Coal contains energy—chemical energy. It was formed long ago from ancient plants. Coal is called a fossil fuel.			
3. Biomass is a renewable energy source. We can grow biomass in a short period of time.		3. Coal is a nonrenewable energy source. We can't make more in a short period of time.			
4. We can burn biomass to make heat. We can use the heat to make products, heat buildings, and make electricity.		4. We burn coal to make heat. We use the heat to make electricity. Industry also burns coal to make steel and other products.			
5. Biomass doesn't have as much energy as fossil fuels. We have to burn more biomass to get the same amount of energy.		5. We have a lot of coal in the U.S. Burning coal is a cheap way to make electricity. Most of our electricity comes from coal.			
6. Burning biomass can pollute the air, but not as much as burning fossil fuels. Biomass can also smell bad when it is burned.		6. Burning coal can pollute the air. It also produces carbon dioxide—a greenhouse gas.			
7. We can also use biomass to make a fuel called ethanol. It is a cleaner fuel than gasoline, but more expensive to use.		7. Power plants and industry work hard to reduce the amount of air pollution from burning coal.			
8. Biomass can be made into a gas called methane and burned like natural gas to make heat.		8. We dig coal from huge coal mines. Coal mines can pollute our water if they are not carefully managed.			
9. We transport biomass mostly by trucks.		9. We transport coal mostly by trains and, sometimes, by barges and trucks.			
10. About three percent of the energy we use in the U.S. is from biomass. Industry makes products with most of the biomass we use.		10. About 23 percent of the energy we use in the U.S. is from coal. We use most of the coal to make electricity.			